Radiotelegraphy utilizing manually encoded Morse code is the most basic method of radio communications. Although it has been superseded by technically superior methods in virtually all other services, it remains second only to voice modes within the Amateur Radio Service. Thus it holds the unique position of constituting THE most common mode available to all amateurs as a ready backup to voice modes.

Radiotelgraphy is "built into" virtually every piece of Amateur Radio communications equipment designed for use on the High Frequency part of the spectrum. No further equipment is required other than a Morse keying device, which can be makeshifted quite easily when necessary.

The critical difference in the operation of Morse based radio-telegraphy is the sole requirement not demanded by any other mode in use - that of operator self-training, in the case of amateur radio operators. While the military once trained many Morse operators, a large number of whom became amateur operators, that source of training has largely disappeared with advancing technology. It is incumbent on amateur radio to supply all the self-training to assure maintainence of adequate number of Morse qualified amateurs if the capabilities of the mode, widely known to those amateurs who routinely use it, are to survive. These capabilities are just as routinely ignored by those who prefer to see the use of Morse disappear.

No one is suggesting advancing Morse over any other method, and as an active amateur I am involved in the promotion and use of advanced digital modes, including PACTOR, CLOVER and PSK31 among others. As an active amateur I am also very well aware that the use of these more efficient modes within amateur radio is very limited, thus they are not routinely available for instant emergency and urgent use, as is Morse code. The reasons for this lack of use lie mostly in the fact that as an avocation many amateurs prefer voice communications rather than the technical involvement demanded by advanced digital work.

The widespread, in-place "installed base" of Morse based radiotelegraphy within the Amateur Radio Service makes it an important communications backup asset for emergency communications of all types, including Homeland Security. As the most basic radiocommunications mode it can only be considered of considerable potential value even though it is not often required to be used for emergency work today. Serious Morse operators understand its "last resort" attributes from firsthand experience stemming from use on the air, where others cannot. As a weak-signal mode very useful in seriously deteriorated radio conditions it has no peer among widely used, widely available Amateur Radio communications modes.

While many prospective amateurs see no need for code testing for licensing, and intend to never use the mode, there are good and valid reasons for requiring all licensees to undergo at least

minimal Morse code training for license qualification. Often these very amateurs who never intended to use Morse find that during the self-training phase they did acquire an interest in further pursuing the mode, and go on to become avid and often expert Morse operators.

The fact that most emergency communications occurs using voice modes does not minimize the potential of Morse to provide general communications by virtue of the widespread existence of Morse-capable equipment and currently by the large numbers of amateurs who routinely use Morse on the air.

The assertion that Morse is no longer needed is incorrect. ANY mode so widely dispersed within the general population is of potentially critical value in circumstances where it happens to be the only mode available for use. When the desperate need is for ANY communications, the very last requirement is for "efficient,high--throughput, modern" modes. The sheer numbers of Morse users within the Amateur Radio Service as opposed to any other non-voice mode makes this point incontestable.

As a longtime professional Public Service communicator I have seen such circumstances arise suddenly when all commercial circuits to a wide area were suddenly taken out by storm damage, a condition which persisted for 72 hours. During the outage critical message traffic relating to storm fatalities was delayed. That one instance is only a small example of the unknown possible scenarios. Those who view Morse as useless because it is "low tech" and "old technology" ignore its true communications value in times where better methods are unavailable for use.

Amateurs not qualified in Morse operation would not be able to identify other Morse stations on the air when interference issues arise and would not know if they were sharing the same freqeuncy with another amateur or other user who should have precedence. Thus he would remain uninformed as to the details and might unintentionally cause destructive interference to priority or emergency communications. The use of computers to copy Morse is problematic at best within amateur radio since virtually all computerized Morse reception suffers greatly from lack of noise immunity.

Accordingly, I very strongly oppose any move to drop Morse code testing from amateur radio license testing. I strongly advocate that Morse self-training for fully qualified amateurs be set at code speeds sufficient to allow successful examinees to actually use radiotelegraphy at functional traffic-handling speeds, not less than 12 words per minute for Extra class licensees, and not less than 5 words per minute for General class licensees.

I am in favor of allowing Technician class licensees to operate Morse on limited portions of some HF bands for the purpose of selftraining and developing skill at its use. Allowing Technician class licensees to operate digital modes on portions of some HF digital subbands would also be beneficial to their self-training.

Technology is developing to the point where any possible

need for maintaining Morse code qualified operators available someday may totally disappear. It is clear that hasn't happened yet. As long as substantial portions of the communications world, amateur and otherwise, continue significantly widespread use Morse, there is no justification for allowing amateurs seeking full license qualifications to avoid learning to use it. An Amateur Extra class licensee cannot be a fully qualified expert amateur without proficiency in the use of Morse.

Richard S. Carroll
Amateur Radio licensee W0EX
Licensed since 1957